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RETURN RECEIPT REQUESTED

December 20, 2011

Mr. William Tong  
United States Environmental Protection Agency  
77 West Jackson Blvd (WU-16J)  
Chicago, Illinois 60604-3590  
ATTN: UIC Branch, Direct Implementation

Re: UIC Permits IN-091-11-0001 and IN-091-11-0002

Dear Mr. Tong:

The following Monthly Report for *October* 2011 is being submitted in compliance with the referenced Permits Part II(D)(1)(a) thru (f).

The reporting data are as follows:

- (a) The analysis of the injection fluid for the month is submitted as Attachment I. Samples and measurements taken for monitoring conform to the requirements of Part I (E) (10) and Part II (C) (3) of the Permits.
- (b) A tabulation of maximum injection pressure, daily maximum and minimum annulus tank levels, and minimum differential between simultaneous measurements of injection pressure and annulus pressure for each day of the month for Well #1 and Well #2 are shown in Attachments II and III respectively.
- (c) Daily maximum injection pressure and daily average flow rate are shown for Well #1 and Well #2 in Attachment IV. Daily maximum and minimum annulus tank levels for Well #1 and Well #2 are shown in Attachment V.
- (d) A statement of the total volumes of the fluid injected to date, in the current calendar year, and the current month:

Cumulative volume injected

Well #1	1,647,526,452	Gallons
Well #2	1,582,354,489	Gallons

Volume injected year-to-date

Well #1	67,303,831	Gallons
Well #2	29,657,689	Gallons

Volume injected this month

Well #1	6,318,857	Gallons
Well #2	-	Gallons

- (e) A tabulation of the dates and amounts of water added to or removed from the annulus systems during the month, and the cumulative additions and cumulative subtractions for the current month and each of the past 13 months are included in Attachment VI for Well #1 and Well #2.
- (f) Injection operating summary of compliance, alarms and scheduled maintenance is listed below.



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UIC BRANCH  
EPA, REGION 5

Well #1: The following non-compliance event(s) occurred:

None occurred.

Well #1: The following alarm shutdown(s) and scheduled maintenance occurred:

None occurred.

Well #2: The following non-compliance event(s) occurred:

None occurred.

Well #2: The following alarm shutdown(s) and scheduled maintenance occurred:

1. The North well remained shut in throughout the month since initial shut in on July 23.

Please note that any events in section (f) above are referenced in the notes in Attachments II and III.

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Please contact me at Criterion as necessary with any questions regarding this data or report.

Sincerely,



Jesse Trent  
HSSE Advisor  
Criterion Catalysts & Technologies L.P.



**WATCON, INC.**  
Industrial Water Treatment

WATCON, INC.  
2215 SOUTH MAIN  
SOUTH BEND, IN 46613  
(574) 287-3397, (574) 287-2427 fax

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## WEEKLY DEEPWELL ANALYSIS MONTH-END SUMMARY

Client:

Criterion Catalyst  
1800 East US HWY 12  
Michigan City, IN 46360

Attn:

Mr. Peter Olesen

**UIC BRANCH**  
EPA, REGION 5

WEEK ENDING	UNITS	11/7/2011	11/14/2011	11/21/2011	11/28/2011	AVERAGE	METHOD
pH @ 25.7 C	s.u.	7.82	7.84	7.86	7.84	<b>7.84</b>	150.1
Specific Gravity	g/mL	1.046	1.032	1.046	1.043	<b>1.042</b>	ASTM
Total Dissolved Solids	mg/L	53,768	36,200	53,483	49,065	<b>48,129</b>	160.1
Total Suspended Solids	mg/L	2.0	1.6	1.8	1.2	<b>1.65</b>	160.2
Sodium Oxide (Na2O)	mg/L	15,525	12,690	14,715	13,635	<b>14,141</b>	200.7
Aluminum Oxide (Al2O3)	mg/L	1.89	1.02	1.36	1.03	<b>1.33</b>	200.7
Silica (SiO2)	mg/L	1.39	0.63	1.79	0.75	<b>1.14</b>	200.7
Sulfate (SO4)	mg/L	42,935	25,785	43,237	38,368	<b>37,581</b>	A1000

All tests are run at ambient temperature.

Methods may be referenced to U.S. E.P.A. Methods for the Chemical Analysis of Water and Wastes, and Standard Methods for the Examination of Water and Wastewater.

Approved by: Mike Olesen Date: 12/14/11

## ATTACHMENT II

## DEEPWELL MONTHLY REPORT DATA - Part II(D)(1)(b)

WELL #1

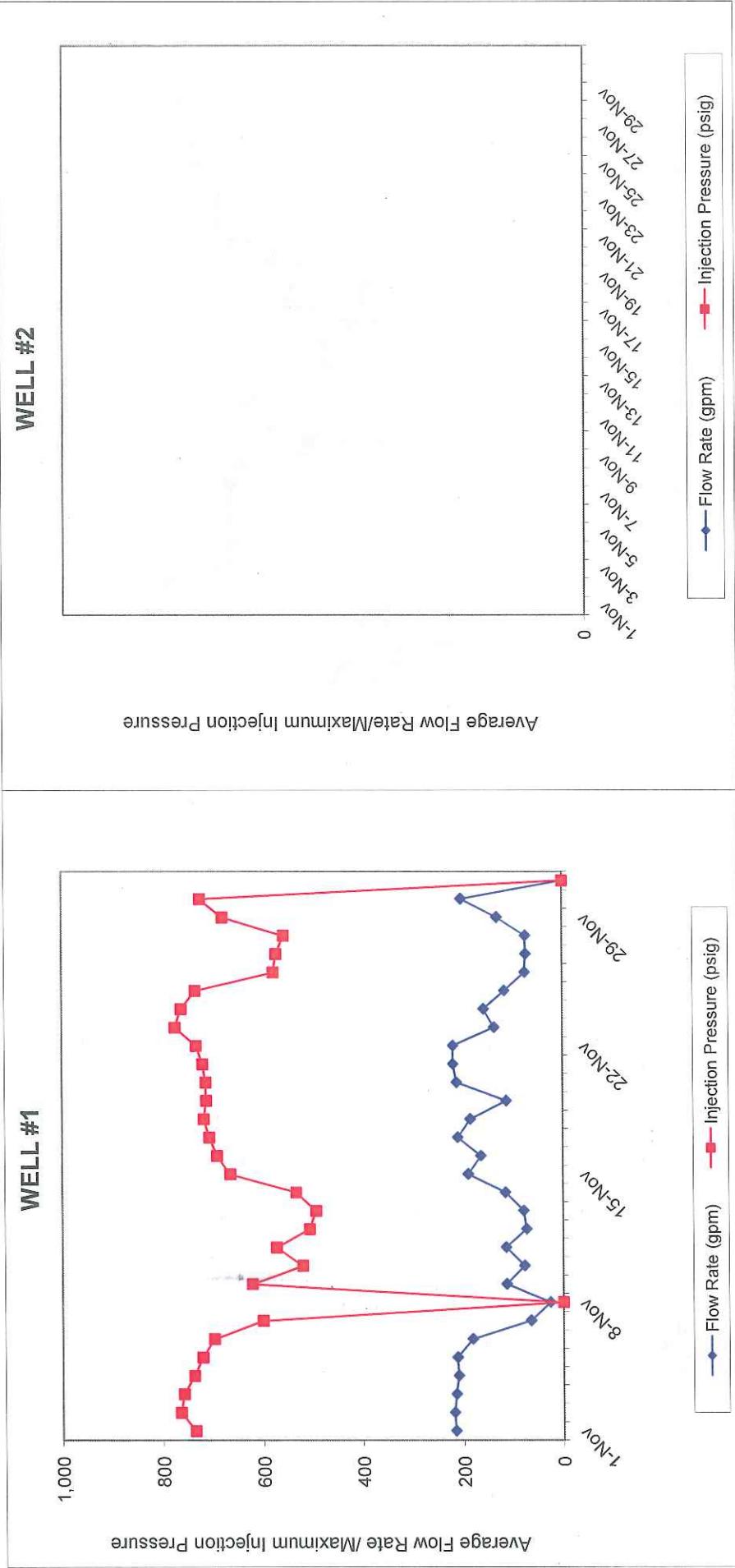
November, 2011

Date	Flow Rate (gpm) Avg. Max.	Injection Pressure (psig) Min. Avg. Max.	Annulus Pressure (psig) Min. Avg. Max.	Annulus Level (%) Min. Avg. Max.	Total Flow Injected	Min. Tube/Annulus Differential Pressure	Temp.	Note							
1-Nov	216	241	181	711	737	668	1,078	1,169	1,004	75	81	72	311,282	304	119
2-Nov	219	238	27	736	766	115	1,122	1,149	1,060	81	82	80	314,950	349	125
3-Nov	215	230	27	734	760	123	1,028	1,101	963	79	81	76	309,323	258	120
4-Nov	210	217	206	724	739	708	999	1,029	961	77	79	75	302,608	240	117
5-Nov	212	243	27	694	722	138	945	961	920	74	75	73	305,838	233	114
6-Nov	182	224	134	642	699	575	937	977	916	74	76	73	261,709	224	114
7-Nov	65	138	27	217	601	0	753	981	492	73	76	67	93,360	330	117
8-Nov	26	27	19	0	0	0	483	492	476	71	72	70	37,868	477	116
9-Nov	113	206	20	311	622	0	658	840	476	61	66	55	162,720	476	112
10-Nov	77	142	12	274	521	27	723	485	960	56	62	49	110,880	933	105
11-Nov	114	216	12	294	574	13	630	765	495	57	63	50	164,160	482	106
12-Nov	73	133	12	267	507	26	774	790	758	50	51	48	104,400	732	105
13-Nov	79	133	24	260	494	25	710	850	569	52	57	47	113,040	544	102
14-Nov	115	218	12	286	534	38	800	810	790	52	56	47	165,600	752	95
15-Nov	190	246	133	566	666	465	1,020	1,110	930	67	68	66	272,880	465	118
16-Nov	164	228	100	652	692	611	1,099	1,145	1,053	70	71	69	236,160	442	117
17-Nov	210	228	192	681	707	655	1,045	1,050	1,040	71	71	71	302,400	385	118
18-Nov	185	236	134	647	718	576	1,050	1,052	1,048	53	59	47	266,400	472	119
19-Nov	113	213	12	363	713	13	977	1,018	935	70	72	68	162,000	922	120
20-Nov	212	218	206	697	714	679	1,063	1,074	1,051	73	73	72	305,280	372	119
21-Nov	219	219	219	719	720	718	1,067	1,068	1,065	73	73	73	315,360	347	119
22-Nov	219	222	216	727	733	720	1,050	1,052	1,048	73	73	73	315,360	328	119
23-Nov	137	225	48	394	775	13	1,044	1,052	1,035	73	73	73	196,560	1,022	119
24-Nov	158	225	90	395	763	26	1,018	1,050	986	73	73	73	226,800	960	119
25-Nov	116	219	12	368	735	0	698	1,001	395	70	84	55	166,320	395	122
26-Nov	75	137	12	290	579	0	723	993	452	51	56	46	107,280	452	120
27-Nov	73	133	12	307	573	40	743	900	585	46	49	42	104,400	545	109
28-Nov	73	134	12	283	558	8	858	870	845	35	36	34	105,120	837	110
29-Nov	131	250	11	361	680	41	976	1,081	870	44	53	34	187,920	829	112
30-Nov	202	262	142	648	725	571	1,052	1,111	992	52	55	48	290,880	421	115
Summary	146	262	11	475	775	0	904	1169	395	64	84	34	6,318,857	224	115

**ATTACHMENT III****DEEPWELL MONTHLY REPORT DATA - Part II(D)(1)(b)****WELL #2****November, 2011**

Date	Flow Rate (gpm) Avg.	Max	Min.	Injection Pressure (psig) Avg.	Max	Min.	Annulus Pressure (psig) Avg.	Max	Min.	Annulus Level (%) Avg.	Max	Min.	Total Flow Injected	Min. Tube/Annulus Differential Pressure	Temp.	Note
1-Nov																
2-Nov																
3-Nov																
4-Nov																
5-Nov																
6-Nov																
7-Nov																
8-Nov																
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25-Nov																
26-Nov																
27-Nov																
28-Nov																
29-Nov																
30-Nov																
Summary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

**ATTACHMENT IV**  
**DEEPWELL MONTHLY REPORT DATA Part II(D)(1)(c)**  
November, 2011



**ATTACHMENT V**  
**DEEPWELL MONTHLY REPORT DATA Part II(D)(1)(c)**  
November, 2011

